

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-14. (canceled).

15. (currently amended) A method for preparation of a modified host cell comprising:

a) transfecting a host cell with ~~at least one DNA~~ an expression cassette which is covalently coupled to a fluorescent label that provides a non-inheritable trait to the host cell ~~a non-inheritable trait~~,

b) isolating the transfected host cell by detecting the fluorescent label and then separating fluorescent host cells which were transfected from non-fluorescent host cells which were not transfected,

c) culturing the transfected host cell such that fluorescently-labeled polynucleotide integrates into the host cell's genome,

d) multiplying the transfected host cell which has polynucleotide integrated in its genome such that the fluorescent label is diluted and lost in progeny of the transfected host cell, and

e) isolating from non-labeled progeny of the transfected host cell a modified host cell having a changed metabolic property as compared to the host cell prior to transfection.

16. (currently amended) A method for preparation of a desired metabolite by a modified host cell comprising:

- a) preparing a modified host cell according to claim 15 wherein said ~~DNA~~ expression cassette is involved in production of the desired metabolite,
- b) culturing the modified host cell in broth under conditions wherein the desired metabolite is produced, and
- c) isolating the desired metabolite from the culture broth.

17. (currently amended) A The method according to claim 16, wherein the desired metabolite is a primary metabolite.

18. (currently amended) A The method according to claim 16, wherein the desired metabolite is an amino acid, a steroid or a nucleotide.

19. (currently amended) A The method according to claim 16, wherein the desired metabolite is a secondary metabolite.

20. (currently amended) A The method according to claim 19, wherein the desired secondary metabolite is an antibiotic, a vitamin, an anti-infective, a macrolide, a polyketide, a pheromone, an alkaloid or a drug.

Claim 21-26 (canceled)

27. (currently amended) A The method according to claim 15, wherein the at least one DNA expression cassette does not comprise an antibiotic or other selection marker which is an inheritable trait.

28. (currently amended) A The method according to claim 15, wherein RNA and protein expression levels are altered in the modified host cell as compared to the non-modified host cell.

29. (currently amended) A method for preparation of a modified host cell comprising:

a) transfecting host cells with at least one DNA an expression cassette to which a fluorescent label is covalently coupled;

b) separating transfected host cells, which contain the fluorescent label, from non-transfected host cells, which do not contain the fluorescent label, by detection of the fluorescent label; and

c) isolating a modified host cell from the separated and transfected host cells, wherein the at least one DNA expression cassette integrates into the modified host cell's genome thereby permanently changing a metabolic property of transfected host cells as compared to non-transfected host cells.

30. (currently amended) A The method according to claim 29, wherein the transfected host cells are cultured under proliferating conditions between their separation and isolation.

31. (currently amended) A The method according to claim 29, wherein the modified host cell is not isolated by selection with an antibiotic or another marker which is an inheritable trait.

32. (currently amended) A The method according to claim 29, wherein RNA and protein expression levels are altered in the modified host cell as compared to the non-modified host cell.

33. (currently amended) A The method according to claim 29, wherein the modified host cell is a prokaryotic cell, a eukaryotic cell, a mammalian cell or a plant cell.

34. (currently amended) A method for preparation of a modified host cell comprising:

a) transfecting host cells with ~~at least one DNA~~ an expression cassette to which a fluorescent label is covalently coupled;

b) separating transfected host cells, which contain the fluorescent label, from non-transfected host cells, which do not contain the fluorescent label, by detection of the fluorescent label;

c) culturing the host cells containing the fluorescent label ~~containing host cells~~ under proliferating conditions, whereby the fluorescent label is diluted and lost in progeny of the fluorescent label-containing host cells; and

d) isolating a modified host cell from the cultured host cells, wherein a metabolic property of the modified host cell is permanently changed as compared to the non-transfected host cell.

35. (currently amended) A The method according to claim 34, wherein the modified host cell is not isolated by selection with an antibiotic or another marker ~~which~~ that is an inheritable trait.

36. (currently amended) A The method according to claim 34, wherein RNA and protein expression levels are altered in the modified host cell as compared to the non-modified host cell.

37. (currently amended) A The method according to claim 34, wherein the modified host cell is a prokaryotic cell, a eukaryotic cell, a mammalian cell or a plant cell.